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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER 119620.00112 U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/530728</b> Not yet assigned
INTERNATIONAL APPLICATION NO. PCT/US03/31806	INTERNATIONAL FILING DATE 08 October 2003 (08.10.2003)	PRIORITY DATE CLAIMED 08 October 2002 (08.10.2002)
TITLE OF INVENTION METHODS AND SYSTEMS FOR MULTIPLEXING IR-MEDIATED HEATING ON A MICROCHIP		
APPLICANT(S) FOR DO/EO/US University of Virginia Patent Foundation		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> Has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input checked="" type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
<ol style="list-style-type: none"> <li>11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4)</li> <li>20. <input type="checkbox"/> Other items or information:</li> </ol>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

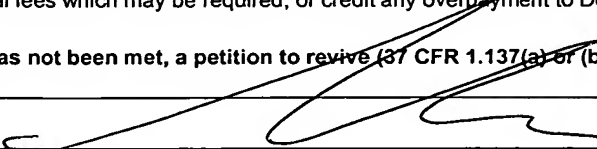
JC06 Rec'd PCT/PTO 08 APR 2005

PTO-1390 (Rev. 02-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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U.S. APPLICATION NO. (if known, see 37 CFR 1.53) Not yet assigned		INTERNATIONAL APPLICATION NO. PCT/US03/31806		ATTORNEY'S DOCKET NO. 119620.00112	
The following fees have been submitted				<b>CALCULATIONS    PTO USE ONLY</b>	
21. <input checked="" type="checkbox"/> Basic national fee .....				\$300	\$300
22. <input checked="" type="checkbox"/> Examination fee If international preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4) .....				\$100	
All other situations .....				\$200	\$100
23. <input checked="" type="checkbox"/> Search fee Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority .....				\$100	
International Search Report prepared and provided to the Office .....				\$400	
All other situations .....				\$500	\$100
<b>TOTAL OF 21, 22 and 23 =</b>				<b>\$500</b>	
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE	
- 100 =	/50 =			x \$250	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.402(h))				\$	
<b>CLAIMS</b>		<b>NUMBER FILED</b>		<b>NUMBER EXTRA</b>	
Total Claims		38 - 20 =		18	
Independent Claims		2 - 3 =		0	
				x \$ 50	
				x \$200	
				+ \$360	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$900</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				\$	
<b>SUBTOTAL =</b>				<b>\$1,400</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28,3.31). \$40.00 per property				\$	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$1,400</b>	
				Amount to be refunded:	
				Amount to be charged:	
a. <input checked="" type="checkbox"/> A check in the amount of \$ 1,400.00 to cover the above fees is enclosed.					
b. <input type="checkbox"/> Please charge my Deposit Account No. 23-2185 in the amount of \$                      to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 23-2185. A duplicate copy of this sheet is enclosed.					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the international application to pending status.</b>					
<b>SEND ALL CORRESPONDENCE TO:</b>					
CUSTOMER NO.: 27557 BLANK ROME LLP 600 New Hampshire Avenue, N.W. Washington, D.C. 20037 Tel: (202) 772-5800 Fax: (202) 572-8398			 Signature Michael C. Greenbaum Name 28,419 Registration No. April 8, 2005 Date		

FORM PTO-1390 (REV. 02-2005)

THE OFFICIAL DATE STAMPED HEREON BY THE U.S. PATENT  
AND TRADEMARK OFFICE WILL ACKNOWLEDGE RECEIPT  
OF THE FOLLOWING:

Inventor: James P. Landers  
Title: METHODS AND SYSTEMS FOR MULTIPLEXING  
IR-MEDIATED HEATING ON A MICROCHIP  
Filing Date: April 8, 2005  
Docket No. 119620.00112

Submitted herewith are:

- Transmittal letter
- Copy of International Application
- Information Disclosure Statement Under 37 CFR 1.97
- IDS Form 1449-A with (1) one reference (literature document)
- Declaration
- Check #13153 in the amount of \$1400.00

MCG/kar  
April 8, 2005

JC10 Rec'd PCT/PTO 0 APR 2005

10/530728

The PTO did not receive the following  
listed item(s) no post-card